



THE STATE OF UTAH
OFFICE OF STATE ENGINEER

WAYNE D. CRIDDLE
STATE ENGINEER

SALT LAKE CITY

December 3, 1957

MEMORANDUM

To: Mayfield Irrigation Company, Newfield Irrigation Company and Gunnison Irrigation Company

From: Donald C. Norseth, Distribution Engineer

Re: San Pitch River

At the request of Mayfield Irrigation Company, Newfield Irrigation Company, and the Gunnison Irrigation Company, the State Engineer's Office initiated a study of the distribution system of Birch Creek tributary to 12-Mile Creek to the San Pitch River, Sanpete County. A study was made of Town Reservoir, Newfield Reservoir, Dry Hole Reservoir, Bear Hole Reservoir and Twin Lakes.

The entire Birch Creek drainage area is situated in a basin on an extremely steep northern slope of 12-Mile Canyon. All the reservoirs mentioned contribute to Birch Creek, affect the constant flow of 12-Mile Creek and probably contribute to a great majority of the springs and seeps immediately north of 12-Mile Creek.

It was noted during the investigations that all the weirs that are installed on the entire system are of odd size, poorly installed and maintained, and should be replaced as soon as possible.

The following recommendations are presented as an aid toward distribution problems during 1958:

The Newfield Irrigation Company should install a Parshall flume immediately below the dam of the Newfield Reservoir, not more than 300 feet down channel from the outlet.

The seeps and springs that are below this outlet should not be considered as part of their storage right, but should be considered as an important contributory drainage to the natural flow of Birch Creek.

The Dry Hole Reservoir is an important segment of the Newfield Reservoir, Twin Lakes system, and its utilization is probably beneficial to the area as a whole. However, as it has no visible outlet, the only conclusion that may be drawn at this time is that the upper and lower seeps, immediately southeast of the reservoir site, should be considered as the outlet for this reservoir and distributed as such.

It is our belief that these recommendations could be used for equitable distribution of water during the 1958 year, and that during this period we will continue our studies toward recommendations for a more permanent system of distribution.

If there are any questions concerning these problems, we will be happy to meet with you and discuss them at any time.